

SUGGESTED MATRIX OF SCOPE RESPONSIBILITY				
ITEM	SHOWN ON:	FURNISHED BY:	INSTALLED BY:	NOTES: (SEE DESCRIPTIONS BELOW)
TELECOMMUNICATIONS ROUGH-IN (REFER TO MATERIAL LIST AND SPECIFICATION SECTION 27 05 33 FOR DEFINITION)	T-SERIES	E.C.	E.C.	1
INFORMATION OUTLET FACEPLATE	T-SERIES	T.C.	T.C.	
INFORMATION OUTLET JACKS AND TERMINATIONS	T-SERIES	T.C.	T.C.	
CONDUIT SLEEVES (WHEN SHOWN ON DRAWINGS)	T-SERIES	E.C.	E.C.	
CONDUIT SLEEVES (NOT SHOWN BUT REQUIRED FOR PROPER INSTALLATION OF SYSTEM)	N/A	T.C.	E.C.	2,4
TECHNOLOGY SYSTEMS ROUGH-IN	T-SERIES	E.C.	E.C.	3,4
LINE VOLTAGE POWER (+120V OR GREATER)	E-SERIES	E.C.	E.C.	
LINE VOLTAGE POWER (NOT SHOWN BUT REQUIRED FOR PROPER INSTALLATION OF SYSTEM)	N/A	T.C.	E.C.	2,4
LINE VOLTAGE POWER FOR DOOR HARDWARE POWER SUPPLIES	ARCH SPEC	E.C.	E.C.	
LOW VOLTAGE CABLING FOR TECHNOLOGY SYSTEMS	T-SERIES	T.C.	T.C.	
BRIDLE RINGS OR OTHER CABLE ROUTING METHODS (OTHER THAN CONDUIT AND CABLE TRAY)	T-SERIES	T.C.	T.C.	5
WIRE MANAGEMENT (WITHIN EQUIPMENT RACKS AND FOR WALL MOUNTED FIELDS)	T-SERIES	T.C.	T.C.	

NOTES:

- LOCATIONS OF TELECOMMUNICATIONS ROUGH-IN SHALL BE INDICATED BY THE INFORMATION OUTLET SYMBOL (▽) ON THE CONTRACT DOCUMENTS.
- BASED ON THE INHERENT DIFFERENCES IN PRODUCTS FROM VARIOUS MANUFACTURERS, ALL REQUIRED EQUIPMENT MAY NOT BE SHOWN ON THE DRAWINGS FOR ALL ACCEPTABLE MANUFACTURERS.
- INCLUDES BACKBOXES AND CONDUIT REQUIRED FOR THE TECHNOLOGY SYSTEMS INSTALLATION. THE E.C. SHALL BASE THE BID ON THE BASIS OF DESIGN SHOWN ON THE CONTRACT DOCUMENTS.
- ALL CHANGES TO THE SLEEVES, BACKBOXES, CONDUITS AND POWER REQUIRED BECAUSE OF THE T.C.'S SELECTION OF AN ALTERNATE ACCEPTABLE MANUFACTURER (OR FROM SYSTEM CONFIGURATIONS THAT ARE LEFT TO THE CHOICE OF THE CONTRACTOR) SHALL BE INCLUDED IN THE T.C.'S BID. THIS BID SHALL INCLUDE INSTALLATION BY AN LICENSED ELECTRICIAN.
- UNLESS TRADE RULES DICTATE OTHERWISE.

GENERAL TELECOMMUNICATIONS NOTES:

- "1/43-T1" INDICATES DETAIL NUMBER / SHEET NUMBER.
- "SC-MPP-1" INDICATES MATERIAL LIST ITEM IN HEX SYMBOL.
- "(C)" INDICATES KEYED NOTE USED TO DESCRIBE ADDITIONAL INFORMATION OF WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL IT IS SHOWN WITH.
- ABBREVIATION KEY:

T.C.

E.C.

M.C.

C

TP

+4"

TELECOMMUNICATIONS CONTRACTOR

ELECTRICAL CONTRACTOR

MECHANICAL CONTRACTOR

ABOVE FINISH FLOOR

CONDUIT

TYPICAL

MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTERLINE
- MOUNTING SUBSCRIPT KEY:

1. TELECOMMUNICATION OUTLETS

A

L

MOUNT ABOVE COUNTER (+6" TO CENTERLINE ABOVE COUNTER OR BACKSPLASH)

MOUNT IN LAB CASEWORK

2. A SLASH IS USED BETWEEN TWO SUBSCRIPTS I.e: A/H

3. REFER TO MATERIAL LIST AND SPECIFICATIONS FOR FULL DESCRIPTIONS AND MANUFACTURERS OF ALL DEVICES.
- LINE TYPE KEY:

NEW WORK BY THIS CONTRACTOR (DARK SOLID LINE)

NEW WORK UNDERFLOOR OR UNDERGROUND BY THIS CONTRACTOR (DARK LONG DASHED LINE)

NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)

EXISTING TO BE REMOVED BY THIS CONTRACTOR (DARK SHORT DASHED LINE)

TELECOMMUNICATIONS INSTALLATION NOTES:

- THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE A.D.A.A.G. (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES)
- CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILING, AND IN FLOOR SLAB, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT IN MECHANICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE EXPOSED ON BUILDING STRUCTURE.
- BOXES LOCATED ON OPPOSITE SIDES OF NON-RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. "THRU-THE-WALL" BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- TELECOMMUNICATIONS EQUIPMENT SHALL BE MOUNTED TO ALLOW ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF TELECOMMUNICATION DEVICES ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
- ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPPERS.
- CONTRACTOR SHALL REMOVE AND REINSTALL ALL CEILING TILES AS REQUIRED FOR THE EXECUTION OF TELECOMMUNICATIONS WORK THAT IS OUTSIDE THE CONTRACT LIMITS OF CONSTRUCTION. CONTRACTOR SHALL REPLACE CEILING TILES WITH IDENTICAL MATERIAL WHERE DAMAGED BY THIS CONTRACTOR.

TECHNOLOGY MATERIAL LIST			
THE SYMBOLS AND THE MATERIAL LIST ARE FOR THE CONVENIENCE OF THE CONTRACTOR. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES AND SHALL FURNISH ALL MATERIAL REQUIRED, WHETHER SPECIFIED OR NOT, TO PRODUCE A SATISFACTORY WORKING SYSTEM. CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE BUT ARE GIVEN ONLY TO AID THE CONTRACTOR IN THE SEARCH FOR MATERIAL. NO MATERIAL SHALL BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. EACH CONTRACTOR SHALL FIRST READ THE COMPLETE DESCRIPTION OF THE MATERIAL ON THESE DRAWINGS AND SPECIFICATIONS. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN. "STANDARD COLOR" INDICATES FACTORY FINISH AVAILABLE AT NO ADDITIONAL CHARGE.			
ITEM NO.	SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS
1	SC-TR-1	TECHNOLOGY ROOM, REFER TO PLANS FOR LOCATIONS AND LAYOUT.	.
2	SC-IO-W	INFORMATION OUTLET, WALL MOUNT, 4-PORT COVERPLATE AS INDICATED ON DRAWINGS, REFER TO DETAIL ON 43-T8 FOR PIN CONFIGURATION. " # " INDICATES INFORMATION OUTLET FACEPLATE CONFIGURATION AS INDICATED ON THE PLANS. REFER TO INFORMATION OUTLET SCHEDULE ON 43-T8. INSTALL INFORMATION OUTLET IN A 4" SQUARE BACKBOX WITH A SINGLE GANG PLASTER RING. INSTALL A 1" EMT CONDUIT TO ABOVE ACCESSIBLE CEILING. PROVIDE REMOVABLE BLANK INSERTS FOR UNUSED PORTS (PANDUIT CMB OR APPROVED EQUAL).	COVERPLATE: PANDUIT OFPE4 SERIES JACK: PANDUIT CAT6 CUS88TP SERIES
3	IP-CV-1	IP CCTV CAMERA, OUTDOOR RATED. REFER TO CAMERA REQUIREMENTS SCHEDULE ON SCHEDULE ON 43-T8 FOR REQUIREMENTS AND ADDITIONAL INFORMATION. REFER TO INFORMATION OUTLET SCHEDULE ON 43-T8 FOR CABLING REQUIREMENTS.	.
4	EP-1	EMERGENCY PHONE, SURFACE MOUNT WITH FLASHING BLUE STROBE. SAFETY YELLOW FINISH, ANALOG SPEAKER PHONE WITH SEPARATE EMERGENCY AND INFORMATION CALL BUTTONS. BUTTONS SHALL BE RAISED LETTERING WITH BRAL. 24VAC POWER. REFER TO INFORMATION OUTLET SCHEDULE ON 43-T8 FOR CABLING REQUIREMENTS.	CODE BLUE CB 2-E COMMENT
6	SC-MPP-1	MODULAR PATCH PANEL, 48 MODULAR RJ-45 TERMINATIONS, MOUNTS DIRECTLY TO EIA/TIA STANDARD 19" RELAY RACK, PORT IDENTIFICATION NUMBERS, PROVIDED WITH COLOR CODING AND LABEL HOLDER KITS, U.L. LISTED. REQUIRES (2) 1.75" MOUNTING SPACES.	PANDUIT CAT 6 DP48688TGY
7	SC-VPP-1	VOICE PATCH PANEL, BIX-TYPE, 100-PAIR, PROVIDE WITH MOUNTING LEGS AND ALL ACCESSORIES, SEE SPECIFICATIONS. PROVIDE WIRE MANAGEMENT PANEL WITH EACH PATCH PANEL.	PANDUIT
8	SC-FDC-1	OPTICAL FIBER DISTRIBUTION CABINET, HIGH DENSITY, MINIMUM 36 FIBER CAPACITY, PROVIDE WITH CLAMP AND GROUNDING KIT, COUPLING PANELS, LC CONNECTORS, COUPLINGS AND JUMPERS. REQUIRES (1) 1.75" MOUNTING SPACES.	PANDUIT FRME SERIES
9	SC-CPP-1	CABLE PROTECTOR PANEL, 50-PAIR SURGE PROTECTION MODULE, BIX TYPE INPUT TERMINATIONS AND BIX-TYPE OUTPUT TERMINATIONS, PROVIDING WITH PLASTIC HOUSING. POPULATE WITH SOLID STATE PROTECTOR UNITS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.	CIRCA
10	SC-HWM-1	HORIZONTAL WIRE MANAGEMENT, 1.5" X 3" 3" PRE-ASSEMBLED D-RINGS ON FRONT, 1.5" X 5" PRE-ASSEMBLED D-RINGS ON REAR. PROVIDE WITH COVER. REQUIRES (1) 1.75" MOUNTING SPACE.	PANDUIT
11	SC-ER-1	STANDARD EQUIPMENT RACK, 19" WIDE X 84" HIGH.	PANDUIT
12	SC-TTB-1	TELECOMMUNICATIONS TERMINAL BOARD, 4" X 8" X 3/4" A-C GRADE FIRE-RATED PLYWOOD. EXPOSED SIDE SHALL BE SMOOTH. MOUNT VERTICALLY WITH TOP OF PLYWOOD AT 86" A.F.F. ON ALL WALLS IN CABLE ROOM.	.
13	SC-UPS-1	SMART UPS 3KVA WITH 120V OUTPUT AND USB PORT INTERFACE. PROVIDES (8) NEMA 5.15R AND (2) NEMA 5.20R OUTLET CONNECTION.	APC SMART UPS 3000VA
14	SC-LR-1	LADDER RACK, 18" W TUBULAR STEEL CONSTRUCTION, RUST RESISTANT ENAMEL FINISH, REMOVE SHARP BURRS FROM LADDER RACK AND REPAINT ALL AREAS THAT HAVE BEEN FIELD MODIFIED, CUT OR EXPOSED. U.L. LISTED.	HOMACO INC. TR10-18 CHATSWORTH PRODUCTS 8-LINE
15	SC-GND-1	WALL-MOUNT GROUND BAR, 4" H X 12" L X 1/4" D COPPER, ELECTRICALLY ISOLATED BY INSULATORS INTEGRAL TO MOUNTING BRACKETS. PROVIDE UNIT CONFIGURED WITH SIXTEEN (16) SETS OF 5/16" HOLES SPACED 5/8" ON CENTER TO ACCOMMODATE "A" SPACED TWO-HOLE COMPRESSION LUGS AND THREE (3) SETS OF 7/16" HOLES SPACED 1" ON CENTER TO ACCOMMODATE "C" SPACED TWO-HOLE COMPRESSION LUGS. ANS/EIA/TIA-607 AND BICSI COMPLIANT. UL LISTED. REFER TO 4/43-T7 FOR ADDITIONAL INFORMATION.	CHATSWORTH PRODUCTS 40T5-012 PANDUIT ERICO HARGER
16	VS-PS-1	CCTV CAMERA POWER SUPPLY, INDOOR, 120VAC INPUT, 24/28VAC OUTPUT, AC POWER INDICATOR WITH MASTER ON/OFF SWITCH, INDIVIDUAL OUTPUTS WITH CIRCUIT BREAKER PROTECTION, POWER SUPPLY SIZED AS REQUIRED FOR ALL CAMERAS, PTZ EQUIPMENT, HEATERS/BLOWERS AND MISCELLANEOUS ACCESSORIES ON THE PROJECT, REFER TO SPECIFICATION SECTION 28 23 00 FOR COMPLETE INFORMATION.	ALTRONIX PANASONIC
17	SC-NS-1	RACK MOUNTED 48-PORT SWITCH, PROVIDE ALL REQUIRED GBC CARDS AND PATCH CORDS FOR A COMPLETE TURNKEY INSTALLATION.	CISCO WS-3750G-48
18	VS-ARH-1	16-CHANNEL ACTIVE RECEIVER HUB, CONVERTS STANDARD CATEGORY 6 CABLING TO BNC FOR CONNECTION TO MATRIX SWITCH OR DVR. PROVIDES AUTOMATIC FAULT PROTECTION.	NVT NV-1672 NITEX
19	AC-ISC-1	ACCESS CONTROL INTELLIGENT SYSTEM CONTROLLER, PROVIDE WITH ALL REQUIRED CABINETS AND POWER SUPPLIES AND ACCESSORIES FOR A COMPLETE TURN-KEY SYSTEM INSTALLATION.	LENEL LNL-2220
20	AC-RIM-1	ACCESS CONTROL DUAL READER INTERFACE CARD, PROVIDE WITH ALL REQUIRED CABINETS AND POWER SUPPLIES AND ACCESSORIES FOR A COMPLETE TURN-KEY SYSTEM INSTALLATION.	LENEL LNL-1320
21	CR	125KHZ PROXIMITY CARD READER, MULTI COLOR LED LIGHT AND SUPPORTS FORMATS UP TO 85 BITS. WALL MOUNT. FPS 201 COMPLAINT.	HID OR APPROVED EQUAL
22	CSS	ACCESS CONTROL DOOR IDENTIFIER. REFER TO ACCESS CONTROL SCHEDULE ON 43-T8, DOOR ROUGH-IN DIAGRAM ON 5/43-T7, AND ACCESS CONTROL RISER DIAGRAM ON 6/43-T7 FOR ADDITIONAL INFORMATION.	.
23	VS-PC-1	COMPUTER, TOWER, WINDOWS 7 BASED PC. PROVIDE WITH RACK MOUNTED SHELF.	DELL OPTIPLEX
24	VS-MON-1	42" LCD SECURITY DISPLAY, PROVIDE WITH CABLING TO VS-PC-1 AND LCD WALL MOUNT,	PELCO 42NB
25	VS-KVM-1	17" SLIDE OUT KEYBOARD VIDEO MONITOR WITH 8-PORT VGA/PS2 KVM. REQUIRES 1RU SPACE. PROVIDE WITH ALL REQUIRED CABLING.	NTI OR APPROVED EQUAL
26	VS-NVR-1	NETWORK VIDEO RECORDER, PROVIDE SERVER, LICENSES, AND STORAGE FOR A MINIMUM OF 30 DAYS OF STORAGE. CONTRACTOR SHALL ASSUME 7.5 FPS AT FULL RESOLUTION FOR SERVER SPECIFICATIONS AND HARD DRIVE CAPACITY. (16) CAMERAS PER NVR.	LENEL ONGAURD VIDEO
27	VS-OH-1	16-CHANNEL CABLE INTEGRATOR HUB. (16) PORT HUB USED TO DISTRIBUTE VIDEO, DATA AND POWER OVER 4-PAIR CATEGORY 6 CABLING.	NVT NV-716J-PVD NITEX
28	VS-FDX-1 VS-FRX-1	FIBER OPTIC TRANSCEIVER TO SUPPORT RS-485 DATA OVER MULTI-MODE FIBER.	IFS DT1315 TRANSITION NETWORKS
29	SC-ER-2	WALL MOUNTED PIVOTING RACK, 500LB WEIGHT CAPACITY, PROVIDE WITH FAN TO EXHAUST AIR, 19" WIDE MOUNTING RAILS, 28 USABLE DEPTH AND 70" HIGH. PROVIDE WITH BLACK POWDER COAT.	MIDDLE ATLANTIC SR-40-28
30	SC-MPP-2	MODULAR PATCH PANEL, 24 MODULAR RJ-45 TERMINATIONS, MOUNTS DIRECTLY TO EIA/TIA STANDARD 19" RELAY RACK, PORT IDENTIFICATION NUMBERS, PROVIDED WITH COLOR CODING AND LABEL HOLDER KITS, U.L. LISTED. REQUIRES (1) 1.75" MOUNTING SPACES.	PANDUIT CAT 6 DP24488TGY
31	VS-ENC-1	IP VIDEO ENCODER, H.264 AND MPEG4 COMPRESSIONS, EACH ENCODER SERVE RACK SHALL RECEIVE (3) 4-PORT ENCODER BLADES (AXIX 2430) FOR A TOTAL OF (12) PORT PER RACK.	AXIS 291 SERVER RACK

FINAL CONSTRUCTION DOCUMENTS	06/10/11	623 26TH AVENUE
100% REVIEW SUBMISSION (NOT FOR CONSTRUCTION)	04/11/11	ROCK ISLAND, ILLINOIS 61201
75% REVIEW SUBMISSION (NOT FOR CONSTRUCTION)	02/03/11	309.786.0673 Telephone
75% REVIEW SUBMISSION (NOT FOR CONSTRUCTION) - COST ESTIMATE	01/19/11	309.786-5967 Fax
35% REVIEW SUBMISSION (NOT FOR CONSTRUCTION)	11/22/10	
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Drawing Title	Project Title	Project Number	Office of Construction and Facilities Management	
COVER SHEET - TECHNOLOGY	400 CAR PARKING GARAGE	636-402		
Approved: Project Director	Location	Drawing Number	Department of Veterans Affairs	
Iowa City VA Healthcare System Department of Veterans Affairs Medical Center	IOWA CITY, IA	43-TO		
	Date	Checked	Drawn	
	06/10/2011	PETMCG	RICHEN	
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